

BORDER REV. DATE: June 11, 2004

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 639 (WILLOWBROOK ROAD) AT WYCKOFF STREET IN ALLEGANY COUNTY. GEOMETRIC MODIFICATIONS ARE PROPOSED TO PROVIDE A SOUTHBOUND DOUBLE LEFT ALONG MD 639. VIDEO DETECTION IS PROPOSED FOR ALL PRESENCE DETECTION AND SETBACK DETECTION ALONG MD 639. ALL PROPOSED TRAFFIC SIGNAL HEADS WILL BE LED. MD 639 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA FOUR-PHASE, FULL-TRAFFIC ACTUATED MODE. EXCLUSIVE LEFT-TURN PHASING IS PROPOSED FOR SOUTHBOUND MD 639. A WESTBOUND RIGHT TURN OVERLAP IS PROPOSED. A PRE-EMPTION PHASE FOR SOUTHBOUND MD 639 IS PROPOSED.

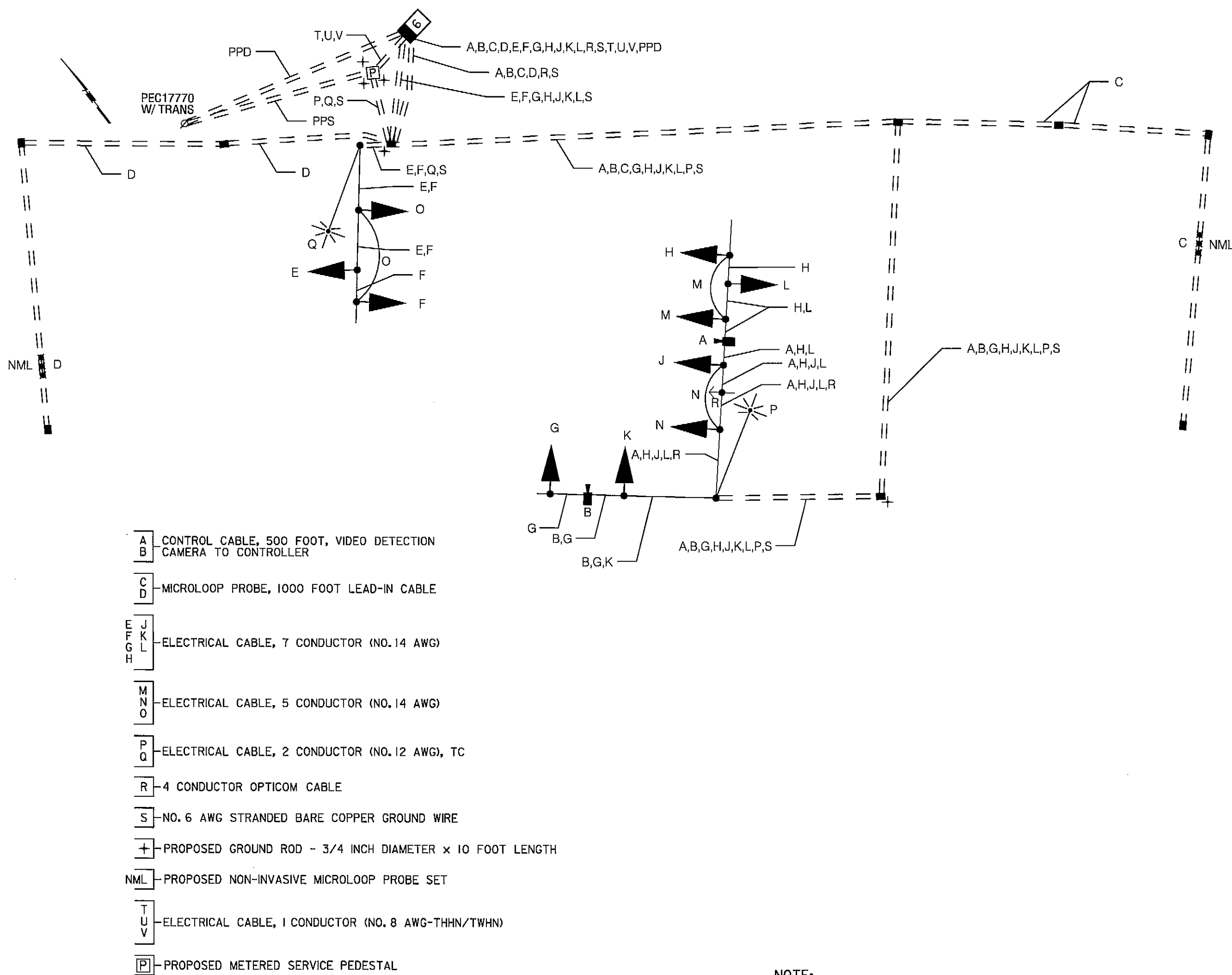
CONTROLLER REQUIREMENTS

INSTALL A NEMA SIZE 6 BASE MOUNTED TRAFFIC SIGNAL CONTROLLER WITH ALL OF THE NECESSARY EQUIPMENT, HARNESSSES, VIDEO DETECTION CAMERA INTERFACE, FOUR-CHANNEL LOOP DETECTOR AMPLIFIER AND DISCRIMINATOR MODULE, 4 CHANNEL, NO.764.

PHONE DROP

THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE INSTALLATION OF THE PHONE DROP. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET ADDRESS, ZIP CODE AND PHONE NUMBER.

WIRING DIAGRAM



THE CONTACT PERSONS FOR DISTRICT #6/00TS ARE AS FOLLOWS:

District #6

Mr. George Small
Assistant District Engineer - Traffic
Phone: 301-729-8444

Mr. David Felker
District Utility Engineer
Phone: 301-729-8439

Mr. Gary Shank
Assistant District Engineer - Maintenance
Phone: 301-729-8457

Mr. John True
Assistant District Engineer - Construction
Phone: 301-729-8411

Office of Traffic & Safety

Mr. Richard L. Daff Sr.
Chief, Traffic Operations Division
Phone: 410-787-7630

Mr. Robert Snyder
Assistant Division Chief, Traffic Operations
Phone: 410-787-7630

Mr. Edward Rodenhizer
Chief, SHA Traffic Signal Shop
Phone: 410-787-7650

Mr. Eugene Bailey
Team Leader Sign Operation
410-787-7670

The Power Company Representative Is:
Allegheny Power
800 Cabin Hill Drive
Greensburg, PA 15601
Phone: 1-800-255-3443

City of Cumberland Contact Is:
Department of Public Works
215 Bowen Street
P.O. Box 1702
Cumberland, MD 21502
Phone: 301-759-6620

EQUIPMENT LIST 'A'

EQUIPMENT TO BE SUPPLIED BY THE SHA

CAT CODE QUANTITY DESCRIPTION

NONE

EQUIPMENT LIST 'B'

APPROVED SHA EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE QUANTITY DESCRIPTION

800000	1 EA	EIGHT-PHASE FULLY-ACTUATED CONTROLLER HOUSED IN A NEMA '6' BASE MOUNTED CABINET WITH ALL NECESSARY HARNESSSES
800000	1 EA	FOUR-CHANNEL LOOP DETECTOR AMPLIFIER
800000	1 EA	OPTICOM NO. 721 DETECTOR EYE
800000	1 EA	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
800000	1 EA	VIDEO DETECTION CAMERA INTERFACE (1-4 CAMERAS)
800000	65 SF	FURNISH AND INSTALL SHEET ALUMINUM SIGNS - MAST ARM/GROUND MOUNT
	2 EA	- W3-3 (36"x36")
	2 EA	- D95-25 (24"x24")
	2 EA	- R3-5L (30"x36")
	1 EA	- D-3(1) (VARx32")
	1 EA	- D-3(1) (VARx32")
	1 EA	- "WYCKOFF ST" (DUAL FACED)
	1 EA	- "WILLOWBROOK RD"
807202	1 EA	METERED SERVICE PEDESTAL
810605	2 EA	NON-INVASIVE MICROLOOP PROBE, 1000 FOOT LEAD-IN CABLE
816001	2 EA	VIDEO DETECTION CAMERA
816010	2 EA	CONTROL CABLE, 500 FOOT, VIDEO DETECTION CAMERA TO CONTROLLER
818021	1 EA	STEEL POLE WITH TWIN 50 FOOT MAST ARM
818030	1 EA	STEEL POLE WITH 38 FOOT MAST ARM
831010	2 EA	250 WATT HPS LAMP AND LUMINAIRE
860284	32 EA	12 INCH LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860288	300 LF	4 CONDUCTOR OPTICOM CABLE
866104	2 EA	20 FOOT LIGHTING ARM ON TRAFFIC SIGNAL STRUCTURE

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	
PHASE 1 + 6				G	G	R	R	R	R	R/G	
PHASE 1				G	G	R	R	R	R	R/Y	
PHASE 2 + 6				G	G	G	G	G	R	R	
PHASE 2 + 6 CHANGE				Y	Y	Y	Y	Y	R	R	
PHASE 4				R	R	R	R	R	G	G	
PHASE 4 CHANGE				R	R	R	R	R	Y	Y	
PRE-EMPTION 1				G	G	G	G	G	R	R	
PRE-EMPTION 1 CHANGE				Y	Y	Y	Y	Y	R	R	
FLASHING OPERATION (10PM - 6AM)	FL/RA	FL/RA	FL/RA	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	

EQUIPMENT LIST 'C'

EQUIPMENT TO BE PURCHASED BY THE DEVELOPER AND INSTALLED BY THE CONTRACTOR. ALL EQUIPMENT IN THIS LIST SHALL HAVE CATALOG CUTS SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.

CAT CODE QUANTITY DESCRIPTION

120500	1 LS	MAINTENANCE OF TRAFFIC
203030	3 CY	TEST PIT EXCAVATION
585624	80 LF	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
801004	7 CY	CONCRETE FOR SIGNAL FOUNDATION
801106	36 LF	WOOD SIGN SUPPORTS, 4 INCH X 6 INCH
802501	340 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805125	400 LF	2 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
805135	750 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
805140	60 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - TRENCHED
805150	130 LF	3 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - SLOTTED
805155	200 LF	4 INCH SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT - SLOTTED
810022	50 LF	ELECTRICAL CABLE - 1 CONDUCTOR, NO. 8 AWG-THHN/THWN
811011	9 EA	ELECTRICAL HANDHOLE
822500	1 EA	AS BUILT FOR SHA ON CADD
837001	5 EA	GROUND ROD - 3/4 INCH DIAMETER BY 10 FOOT LENGTH
861107	70 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO.14 AWG)
861108	1900 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO.14 AWG)
861116	380 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO.12 AWG), TC

EQUIPMENT LIST 'D'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

CAT CODE QUANTITY DESCRIPTION

NONE - ALL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR



STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 639 (WILLOWBROOK ROAD) AT
WYCKOFF STREET
CUMBERLAND, MARYLAND

GENERAL INFORMATION

SCALE NONE DATE OCTOBER 2010 CONTRACT NO. BW096M82

DESIGNED BY MML COUNTY ALLEGANY
DRAWN BY MML LOGMILE 01063900.32
CHECKED BY MML T.I.M.S. NO. K606
F.A.P. NO. NA TOD NO.

DRAWING NO. TS-4775-G1 OF SHEET NO. OF 2

LENHART TRAFFIC CONSULTING
TRAFFIC ENGINEERING & TRANSPORTATION PLANNING

331 Redwood Grove Court Millersville, Maryland 21108
Tel: (410) 987-3888 Fax: (443) 782-2288

PPD-PROPOSED PHONE DROP

PPS-PROPOSED UNDERGROUND POWER SERVICE
TO BE MADE BY ALLEGHANY POWER

NOTE:

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (1) YEAR. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITH A RE-REVIEW REQUIRED FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

EAPD PERMIT NO. _____

PLOTTED: MONDAY, OCTOBER 11, 2010 AT 11:13 PM